

**BARZ\_OUT Pro**

**Installation and Setup manual**

**For Use with Oracle Applications**

Document Revision 1.3



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## Requirements

### ***Purpose:***

This document is to be used as a guide for installing BARZ\_OUT Pro for use through Oracle applications. It includes steps for installing BARZ\_OUT Pro on the operating system and for setting up print drivers within Oracle application object library. It will also explain report design steps required by BARZ\_OUT Pro for barcoded field output.

The Oracle instructions were written originally for Oracle 8i; they apply as well for Oracle 11i.

Additional information on the use of BARZ\_OUT Pro can be found in the user manual that is included with the BARZ\_OUT Pro software package.

### ***Users:***

<Identify which functional users and/or department will utilize this barcoded reports >

NAME	DEPARTMENT	PHONE NUMBER

### ***Configuration File Development:***

NAME:  
COMPANY:  
PHONE NUMBER:

### ***Developer:***

NAME:  
COMPANY:  
PHONE NUMBER:

### ***System Administrator:***

<Identify who will be responsible for installing printer information into applicable instances>

NAME:  
COMPANY:  
PHONE NUMBER:

## Operating system installation steps

A directory needs to be created for the BARZ\_OUT Pro software to be installed in:  
e.g. /usr/local/bin/unibar/barzoutpro

Install BARZ\_OUT Pro software into the new directory

Permissions need to be set to allow read and execute on the directory and files for the development group and Oracle applications (if they are distinct). Write permission needs to be given to whoever will setup the configuration (cfg) files.

### DEVELOPER

A configuration file needs to be created from the sample.cfg file for every printer type that will be used. This file determines the barcode types, density, size, etc. that will be used for each printer. Once this file(s) is created then barcode reports should be designed using the control character sets define within it. The naming convention for these files will be the printertype.cfg, e.g. HPLASER.cfg or EPSONLQ.cfg.

*Note: See Appendix A for configuration file content.*

## Oracle setup steps

Determine which printer types you will be using to print barcode reports on. Printer types available are EPSONLQ, EPSONFX, IBMPRO9, IBMPRO24 and HPLASER or printers compatible with these types. Printers used should already be installed in Oracle, if not, contact your System Administrator to do so.

Create a print driver for each printer type and orientation that will be used. This will enable Oracle to pipe the report output file through the BARZ\_OUT Pro program. BARZ\_OUT Pro will then pipe the output to the printer specified at runtime.

*\* Refer to Print Driver Creation for more details. \* Requires System Administration Responsibility*

Create a new print style for each style that will be used. That is, if you will be using portrait reports with barcode, then you will need a 'Portrait Barcode' style.

*\* Refer to Print Style Creation for more details. \* Requires System Administration Responsibility*

Assign the new print style and driver to the printer types that you will be using.

*\* Refer to Printer Type Assignment for more details. \* Requires System Administration Responsibility*

The Internal Concurrent manager may need to be bounced if these new print styles have been used and then changed for them to take effect. Contact your DBA.

Design reports as specified in *Report Design steps*. When these reports are registered, assign the style needed and make it required. E.g. A portrait report with barcode will have the new style 'Portrait Barcode' assigned to it at registration time.

Run reports with barcode style.

## Print Driver Creation

Login as *System Administrator*.

Navigate to *Install/Printer/Driver*

Query up the user driver type that you wish to duplicate. E.g. 'PORTRAIT for Printer HPLJ4SI'

- Make note of the following four fields, they will need to be the same within your new driver.
  - SRW Driver (e.g. HPP)
  - Platform (e.g. Dec Alpha)
  - Initialization (e.g. /eE/e&10o2a7C/e(s0t0p11H/e&a5L) – Cut and paste to avoid errors
  - Reset (e.g. /eE)

Hit the (+) key on the toolbar to insert a new record. Insert in the following fields as appropriate for each driver needed. \*\*\*Check if /eE/e&1 should be &l.

*\*The following is an example of setting up a portrait barcode driver for HPLJ4SI printers. Refer to screen shot A*

Field Name	Required?	QuickPick	Value to Enter	Description of value
Driver Name	Yes	No	PORTRAITHPLJ4SI Barcode	This is the Drivename.
Driver Name	Yes	No	PORTRAIT Barcode for Printer HPLJ4SI	User Driver Name
Description	No	No	Portrait Barcode	Description of the driver
SRW Driver	No	No	HPP (Copied from current portrait driver)	SRW driver that Oracle Reports uses for reference
Platform	No	Yes	Null (Copied from current portrait driver)	This is the platform that oracle is currently residing on.
Driver Method (radio buttons)	Yes	No	Command	Specifies execution method
Driver MethodParameters Spool File Standard Input Program Name	No	No	Null Yes(checked) null	Specifies details of how the program will be executed  Standard Input MUST be checked
Arguments(important)	No	No	** See explanation below	Tell Oracle how to send the output file to BARZ_OUT Pro

Initialization	No	No	/eE/e&10o2a7C...( Copied from current portrait driver)	String that Oracle send to printer to format page
Reset	No	No	/eE (Copied from current portrait driver)	String that Oracle send to printer to reset format

**\*\* The arguments field contains the following values:**

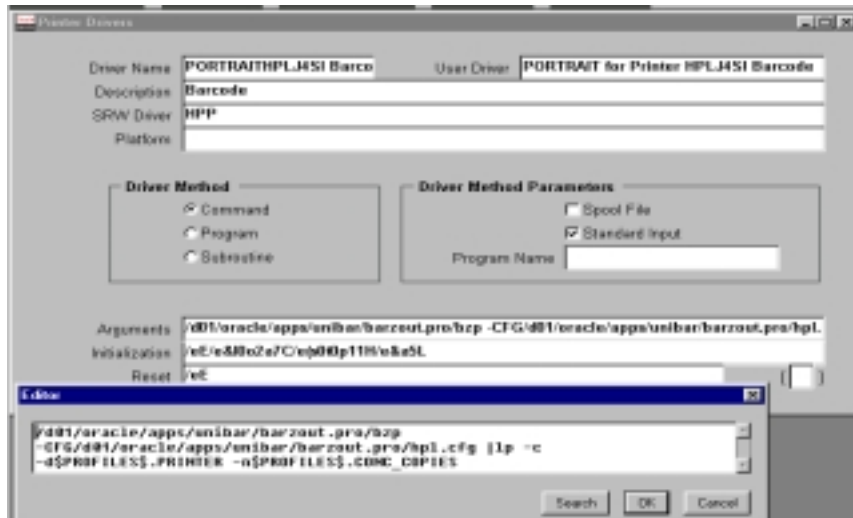
1. *BARZ\_OUT Pro executable with path.*
2. *Printer configuration file and path*
3. *Print command and parameters*

e.g. \$XYZ\_FND\_TOP//bzip -CFG/\$XYZ\_FND\_TOP/bin /HPLASER.cfg |lp -c -d\$PROFILES\$.PRINTER -n\$PROFILES\$.CONC\_COPIES

**Note:** 'lp' command may not be valid for every system. The command from the standard driver should be used. E.g. lp, lpr, etc. Also, a "-l " may need to be added at the end of the argument print string in order for the printer to accept control characters with lpr.

Press the save key.

#### Screen Shot A.



## Print Style Creation

Login as *System Administrator*.

Navigate to *Install/Printer/Driver*

Query up the user style that you wish to duplicate, e.g., Portrait

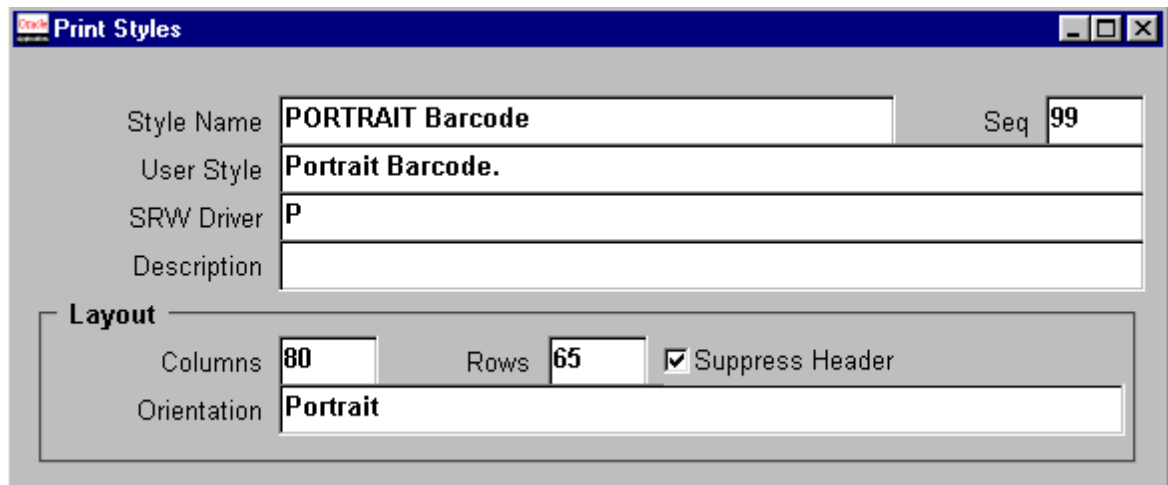
- Make note of the following fields to copy to your new print driver.
  - SRW Driver (e.g. P)
  - Columns (e.g. 80)
  - Rows (e.g. 65)
  - Suppress Header (radio box)
  - Orientation (e.g. portrait)

Hit the (+) key on the toolbar to insert a new record. Insert in the following fields as appropriate for each style needed.

*\*The following is an example of setting up a portrait barcode style for all printers. Refer to screen shot B*

Field Name	Required?	QuickPick	Value to Enter	Description of value
Style Name	Yes	No	Portrait Barcode	This is the style name
Sequence	Yes	No	(A unique sequence number)	Sequence Number
User Style	Yes	No	Portrait Barcode	Style name that users will pick from at print time
SRW Driver	No	No	P (Copied from current portrait driver)	SRW driver that Oracle Reports uses for reference
Description	No	No	Portrait Barcode	Description of style
Columns	Yes	No	80 (copied from current style)	Specifies columns per page
Rows	Yes	No	65 (copied from current style)	Specifies rows per page
Suppress header	No	No	Yes(radio button)	Tell printer to suppress header page)
Orientation	Yes	No	Portrait(copied from current style)	Orientation that will be printed

## Screen Shot B



The screenshot shows a window titled "Print Styles" with a blue header bar. Inside, there are several input fields and a "Layout" section. The "Style Name" field contains "PORTRAIT Barcode", and the "Seq" field contains "99". The "User Style" field contains "Portrait Barcode.", the "SRW Driver" field contains "P", and the "Description" field is empty. The "Layout" section is enclosed in a box and contains "Columns" set to "80", "Rows" set to "65", a checked "Suppress Header" checkbox, and "Orientation" set to "Portrait".

Style Name	PORTRAIT Barcode	Seq	99
User Style	Portrait Barcode.		
SRW Driver	P		
Description			
<b>Layout</b>			
Columns	80	Rows	65
		<input checked="" type="checkbox"/>	Suppress Header
Orientation	Portrait		

## Printer Type Assignment

Login as *System Administrator*.

Navigate to *Install/Printer/Driver*

Query up the printer type that you wish to assign the printer style and driver to (e.g. HPLJ4SI)

Click on a field in the details then press the (+) button on the toolbar to insert a row.

Go to the 'Style' field and quickpick the desired barcode style (e.g. Portrait Barcode)

Tab to the 'Driver' field and quickpick on the desired barcode driver (e.g. PORTRAIT Barcode for printer HPLJ4SI)

Submit this record.

*\* Refer to screen shot C*

This will enable developers to attach this print style to a barcode report at registration time



Screen Shot C

**Printer Types**

Type:

Description:

**Printer Drivers**

Style	Driver Name
Landscape	LANDSCAPEHPLJ4SIMMS
Landscape - Postscript	Landscape - Postscript
Landscape Barcode	LANDSCAPEHPLJ4SI Barcode
Landwide Barcode	LANDWIDEHPLJ4SI Barcode
PORTRAIT	PORTRAITHPLJ4SI
Portrait - Postscript	Portrait - Postscript
<b>Portrait Barcode</b>	<b>PORTRAITHPLJ4SI Barcode</b>

## Report Design Steps

For Developer use:

When designing a report that will have a field barcoded, you must add the control character (triggers) as specified in the configuration file in front of the desired field. This will create an output like ~T1000-001~.

An example field using the sample configuration file from Appendix A would be: ~XLT222 Plus~! Everything after the '~' and before the '~!' will be converted to a barcode at runtime. The barcode would be 3\_of\_9, high density, 1/8" tall, printed horizontally with no human readable text.

**Note:** It is important to put conditions on the leading and trailing characters that do not print them if the source field returns null. In reports 2.0 or higher, you can add code to the format trigger to both fields that keep it from printing when the source field is null

e.g. FUNCTION F\_source\_fieldformat\_trigger return boolean is

BEGIN

IF :c\_source\_column IS NULL THEN RETURN(FALSE);

ELSE RETURN(TRUE);

END IF;

END;

If the report is written in SQL\*Plus then a decode statement can be added to the leading and trailing characters.

E.g. DECODE(source\_column, null, null, '~')||source\_column||DECODE(source\_column,null, null,'~!')

A

## Sign-Off Checklist

TASK	ASSIGNMENT	DATE COMPLETED
Install BARZ_OUT Pro software		
Assign Permissions		
Create configuration files		
Determine Printer types needed		
Create print drivers for each printer type		
Create print styles for all printers		
Assign styles and drivers to printer types		
Acceptance & Sign Off – Sysadmin		
Acceptance & Sign Off – Report Lead		

## File Listing

File Name	File Location	Instance	Version	Description
Bzp			3.0	BARZ_OUT pro executable
Bzp.cfg			1.0	BARZ_OUT Pro configuration template
Manual.txt			1.3	BARZ_OUT Pro manual
Unibar.key			1.0	BARZ_OUT Pro license key
Custom cfg's			1.0	Custom cfg files by printer type

## Appendix

### A. Sample.cfg file content

```
#####
#  BARZ_OUT PRO -- CONFIG FILE
#
# Up to ten barcode types can be defined in Barz_Out Pro.
# Six barcode styles are defined in this sample.
# All config options are listed following the sixsamples.
#
# '#' are comments, remove comment character to set an option
# NOTE!!! if more than one option is available then the last one
# set is used.
#
# Standard defaults should be set in this file and used for
# reporting purposed at each site.  If more than ten options are
# needed, another cfg file can be created and associated with a
# new print driver. e.g. Portrait Barcode 1 and
# Portrait Barcode 2.  Each report will have it's associated style
# required at registration time.
#
# Each Printer type will also need an individual cfg file and
# associated driver set up.  E.G.  HPLASER.cfg and EPSONFX.cfg
#
#####
```

```
#####
#  FIRST, SETUP THE PRINTER INFORMATION
#####
-HPLASER
-AllBins
-8LPI
-10CPI
```

```
#####
#  SETUP THE FIRST BARCODE TYPE 3_of_9 small
#####
-LTrigger=~
-TTrigger=~!
-3_OF_9
-Horizontal
-HEIGHT18
-HIGH
-TextNone
-NoChecksum
```

```
#####
#  SETUP A SECOND BARCODE TYPE 3_of_9 large
#####
-NEXTBARCODE
-LTrigger=&&
-TTrigger=
-3_OF_9
-Horizontal
```

-HEIGHT13  
-HIGHhigh  
-TextNone  
-NoCheckSum

```
#####  
#  SETUP A THIRD BARCODE TYPE CODE128 small  
#####  
-NEXTBARCODE  
-LTrigger=@@  
-TTrigger=  
-CODE128  
-Horizontal  
-HEIGHT18  
-HIGH  
-TextNone  
-NoCheckSum
```

```
#####  
#  SETUP A FOURTH BARCODE TYPE CODE128 large  
#####  
-NEXTBARCODE  
-LTrigger=$$  
-TTrigger=  
-CODE128  
-Horizontal  
-HEIGHT13  
-HIGH  
-TextNone  
-NoCheckSum
```

```
#####  
#  SETUP A FIFTH BARCODE TYPE 3_of_9 small w/checksum  
#####  
-NEXTBARCODE  
-LTrigger=$@  
-TTrigger=  
-3_OF_9  
-Horizontal  
-HEIGHT18  
-HIGH  
-TextNone  
-Checksum
```

```
#####  
#  SETUP A SIXTH BARCODE TYPE 2_of_5 small w/checksum  
#####  
-NEXTBARCODE  
-LTrigger=%  
-TTrigger=  
=2_OF_5  
-Horizontal  
-HEIGHT18  
-HIGH  
-TextNone  
-Checksum
```

```
#####
#  THAT'S IT !
#####

#####
#  OTHER AVAILABLE OPTIONS FOLLOW ...
#####

#####
#  SET BARCODE TYPE
#####
#-3_OF_9
#-2_OF_5
#-EXT_3_OF_9
#-CODE128
#-UPC_A
#-UPC_E
#-POSTNET
#####
#  SET BARCODE ORIENTATION
#####
#-Horizontal
#-Vertical
#####
#  SET BARCODE HEIGHT - use only with 6 lpi
#####
#-HEIGHT16
#-HEIGHT13
#-HEIGHT12
#-HEIGHT23
#-HEIGHT56
#-HEIGHT1
#-HEIGHT15
#-HEIGHT2
#-HEIGHT25
#-HEIGHT3
#-HEIGHT35
#-HEIGHT4
#-HEIGHT45
#-HEIGHT5
#-HEIGHT55
#-HEIGHT6
#####
#  SET BARCODE HEIGHT - use only with 8 lpi
#####
#-HEIGHT18
#-HEIGHT14
#-HEIGHT38
#-HEIGHT12
#-HEIGHT58
#-HEIGHT34
#-HEIGHT78
#-HEIGHT1
#-HEIGHT15
#-HEIGHT2
#-HEIGHT25
#-HEIGHT3
#-HEIGHT35
#-HEIGHT4
```

```

#-HEIGHT45
#-HEIGHT5
#-HEIGHT55
#-HEIGHT6
#####
#   SET DENSITY
#####
#-HIGH                The high density has thin bars.
#-MEDIUM
#-LOW                The low density has wide bars.
#####
#   SET TEXT PRINTING
#####
#-TextNone
#-TextBelow
#-TextAbove
### Left and Right are for Vertical Orientation Only
#-TextLeft
#-TextRight
#####
#   SET CHECKSUM
#####
#-NoCheckSum
#-CheckSum
#####
#   SET LEADING TRIGGER
#####
#-LTrigger=~        The leading trigger is non-blank
#                   Up to five characters long
#####
#   SET TRAILING TRIGGER
#####
#-TTrigger=##        Use only to specified Non-blank trigger.
#####
#   SET PRINTER TYPE
#####
#-EPSONLQ
#-EPSONFX
#-IBMPRO9
#-IBMPRO24
#-HPLASER
#####
#   SET PRINTER BIN
#####
# -AllBins
#-UpperTray
#-ManualTray
#-ManualEnv
#-LowerTray
#-EnvFeeder
#####
#   SET LINES PER INCH
#####
#-6LPI
#-8LPI
#####
#   SET CHARACTERS PER INCH
#####
#-7CPI
#-10CPI
#-12CPI

```

#-17CPI  
#-25CPI

#####  
# Use to start parms for next bar code type if multiples are used  
#####  
#  
#-NEXTBARCODE